

# **STATEMENT FROM THE SEVENTH SOUTHERN AFRICA REGIONAL CLIMATE OUTLOOK FORUM (SARCOF-7), HELD IN LUSAKA, ZAMBIA, FROM THE 3<sup>RD</sup> TO THE 4<sup>TH</sup> OF SEPTEMBER 2003**

## **1.0 SUMMARY**

The southwestern and eastern parts of the SADC region (South Africa, northern Mozambique and Malawi, Seychelles, southern Tanzania and Namibia) are likely to receive normal to below-normal rainfall for the period October to December 2003, while the rest of the region is likely to experience normal to above-normal rainfall. During the period January to March 2004, there are high probabilities of normal conditions across much of southern Africa. However, there is a chance of rainfall sliding into the below-normal category over the southwestern part of the region (southwestern and central Botswana, southern Namibia and western South Africa).

## **2.0 THE SEVENTH SOUTHERN AFRICA REGIONAL CLIMATE OUTLOOK FORUM**

The seventh Southern Africa Regional Climate Outlook Forum was held from 3 to 4 September 2003 to look at the prospects for the 2003/2004-rainfall season. This Outlook covers the period from October 2003 to March 2004. All the SADC countries were represented as well as other scientists from cooperating international institutions. This Outlook is relevant only to seasonal time scales and relatively large areas and may not fully account for all factors that influence regional and national climate variability, such as local and month-to-month variations (intra-seasonal). Users are strongly advised to contact the respective National Meteorological Services for interpretation of this Outlook, additional guidance and updates.

The meeting reviewed the state of the global climate system and its implications for the region. Principal factors taken into account were sea-surface temperatures in the Pacific, Indian and Atlantic Oceans. Usually neutral conditions of sea surface temperature anomalies in the equatorial Pacific Ocean, which are expected to occur over the forecast period, do not exert any significant rainfall trend over southern Africa.

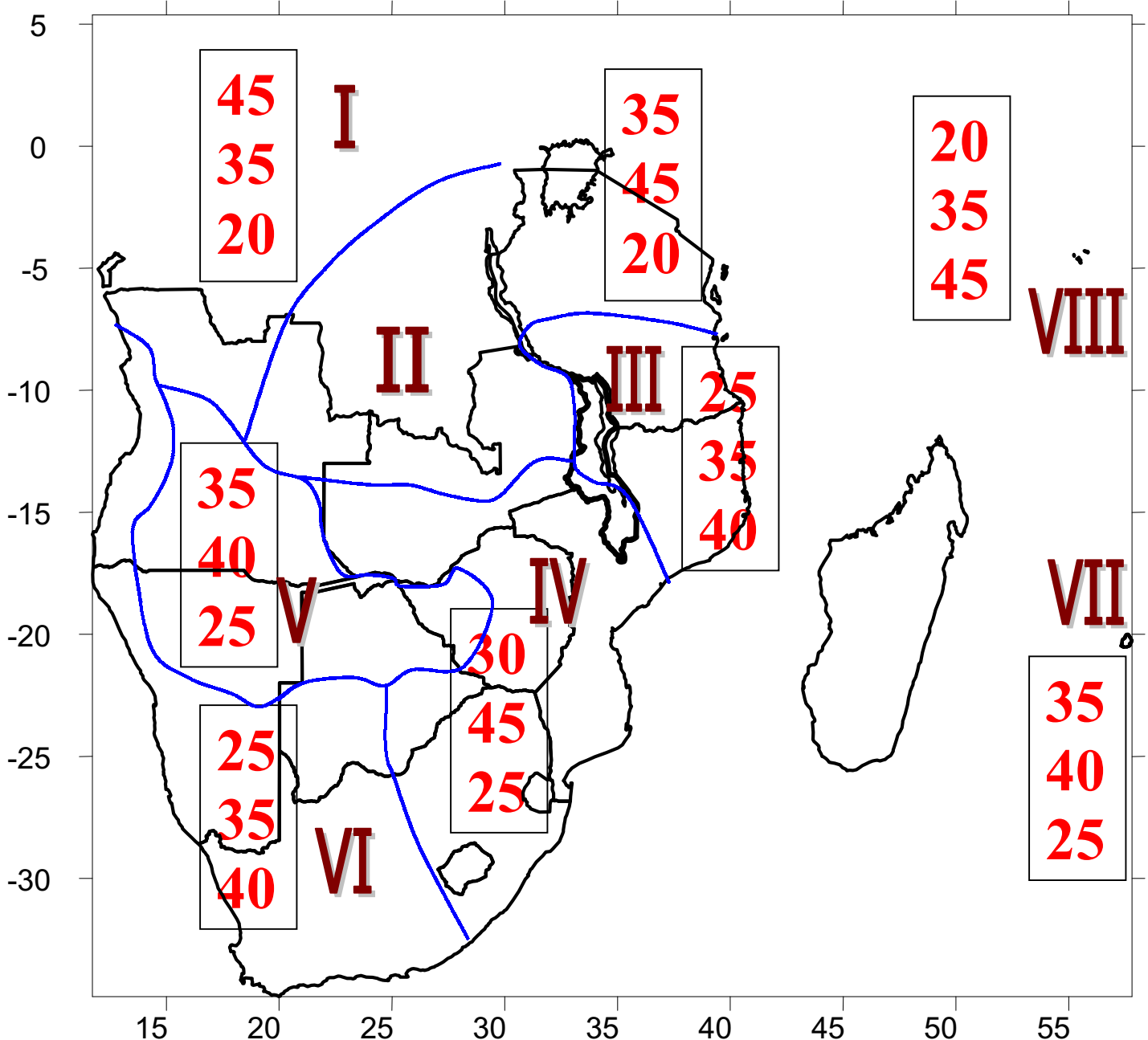
## **3.0 METHODOLOGY**

The climate scientists determined likelihoods of above-normal, normal and below-normal rainfall for each area (see Maps A & B). Above-normal rainfall is defined as within the wettest third of recorded rainfall amounts; below-normal is defined as within the driest third of rainfall amounts and normal is the middle third, centered on the climatological median.

## **4.0 OUTLOOK**

October to March constitutes an important rainfall season over most of southern Africa. The Outlook presented here is divided into two main periods, namely October to December (OND) 2003 and January to March (JFM) 2004.

## October- December 2003 (Map A)



**Zone I:** Northern and western DRC and northwestern Angola.

**Likelihood of Above-normal to Normal rainfall**

**Zone II:** Northern Tanzania, southern DRC, northeastern Angola and northern Zambia.

**Likelihood of Normal to Above-normal rainfall**

**Zone III:** Southern Tanzania, northern Malawi and northern Mozambique.

**Likelihood of Below-normal to Normal rainfall**

**Zone IV:** Southern Zambia, southern Malawi, much of Zimbabwe, southeastern Botswana, central and southern Mozambique, Swaziland, Lesotho and eastern half of South Africa.

**Likelihood of Normal**

**Zone V:** *Southern Angola, northern Botswana and Namibia, and western Zimbabwe.*

**Likelihood of Normal to Above-normal rainfall**

**Zone VI:** *Southwestern Botswana, coastal Angola, southern and coastal Namibia and western half of South Africa.*

**Likelihood of Below-normal to Normal rainfall**

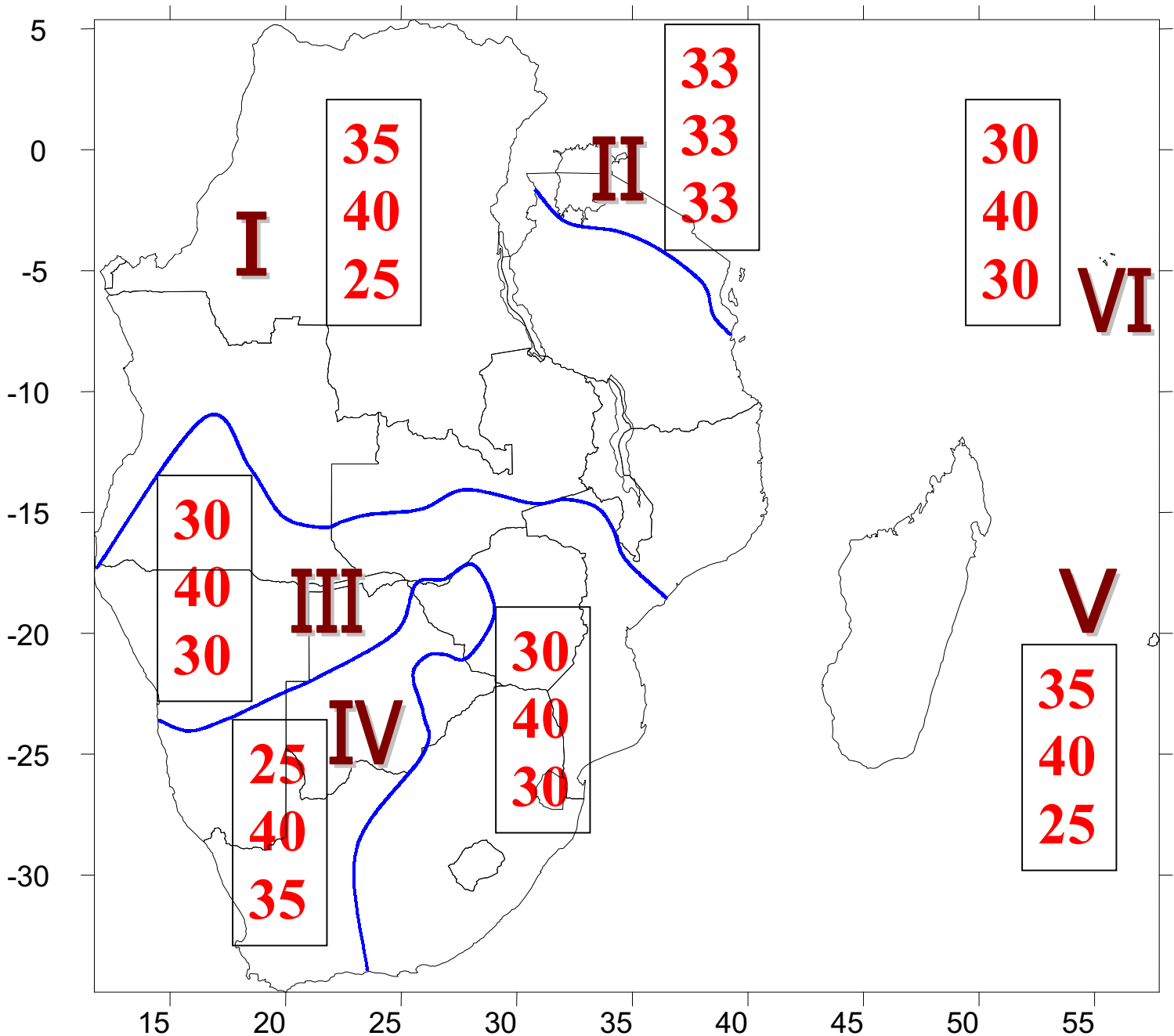
**Zone VII:** *Mauritius.*

**Likelihood of Normal to Above-normal rainfall**

**Zone VIII** *Seychelles*

**Likelihood of Below-normal to Normal rainfall**

**January – March 2004 (Map B)**



**Zone I:** *DRC, most of Angola, northern Mozambique and Zambia, Malawi and much of Tanzania.*

**Likelihood of Normal to Above-normal rainfall**

**Zone II:** *Northern Tanzania.*

**Climatology**

**Zone III:** *Southern Angola and Zambia, northwestern and eastern Botswana, northern Namibia, much of Zimbabwe, central and southern Mozambique, Swaziland, Lesotho and eastern half of South Africa.*

**Likelihood of Normal rainfall**

**Zone IV:** *Central and southwestern Botswana, northwestern Zimbabwe, southern Namibia and western South Africa.*

**Likelihood of Normal to Below-normal rainfall**

**Zone V:** *Mauritius.*

**Likelihood of Normal to Above-normal rainfall**

**Zone VI:** *Seychelles.*

**Likelihood of Normal rainfall**

**MAP CAPTION**

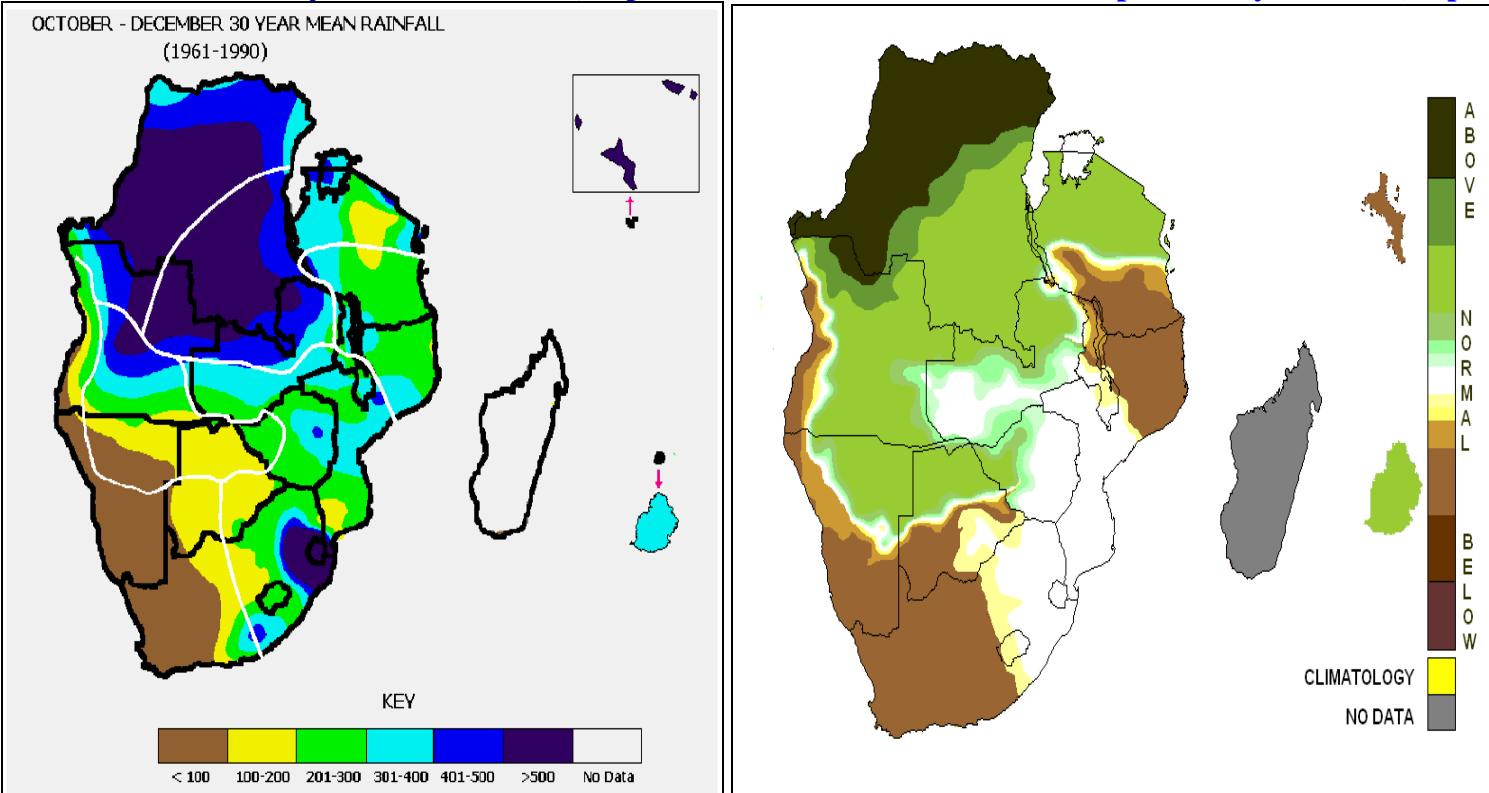
It is emphasized that boundaries between zones should be considered as transition areas. Forecast information is provided only for countries that comprise the Southern Africa Development Community (SADC) region. The numbers for each zone indicate the probabilities of rainfall in each of the three categories, below-normal, normal and above-normal. The top number indicates the probability of rainfall occurring in the above-normal category, the middle number is for normal and the bottom number is for below-normal. For example in the case of Mauritius for October-December 2003, there is a 35% probability of rainfall occurring in the above-normal category; a 40% probability in the normal category; and 25% probability in the below-normal category.

**5.0 CONTRIBUTORS**

The seventh Southern Africa Regional Climate Outlook Forum for the SADC region was organized jointly by the SADC-Drought Monitoring Centre, Harare (SADC-DMC), World Meteorological Organization (WMO), Zambia Meteorological Department and the International Research Institute for Climate Prediction (IRI), funded by the United States Agency for International Development (USAID), National Oceanic and Atmospheric Administration/Office of Global Programmes (NOAA/OGP) and the Kingdom of Belgium.

Scientific contributors included representatives from Meteorological Services of fourteen SADC countries, which are: Angola, Botswana, Democratic Republic of Congo, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe. In addition there were contributors from IRI, University of Cape Town, Drought Monitoring Centres (Harare and Nairobi) and WMO. Additional inputs were also obtained from the European Centre for Medium Range Weather Forecast and the United Kingdom Met-Office.

October-December 30 year rainfall mean (Map C left) & OND 2003 colour-coded probability forecast (map D)



January - March 30 year rainfall mean (Map E left) and JFM 2004 colour-coded probability forecast (Map F)

